UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

October 5, 2007

Mr. Jose Sepulveda, P.E.
Federal Highway Administration
330 West Broadway
Frankfort, Kentucky 40601

Subject: EPA Review Comments on
Draft Environmental Impact Statement (DEIS)
I-65 to US 31W Access Improvement Project
CEQ No. 20070261

Dear Mr. Sepulveda:

The U.S. Environmental Protection Agency (U.S. EPA) Region 4 reviewed the subject Draft Environmental Impact Statement (DEIS) pursuant to Section 309 of the Clean Air Act, and Section 102 (2)(C) of the National Environmental Policy Act (NEPA). We reviewed the subject document, and the purpose of this letter is to provide you with EPA's comments on the DEIS.

The DEIS assesses the potential environmental impacts of the no-build alternative and build alternatives for I-65 access improvement. Improving access to US 31W and I-65 are concerns, along with alleviating traffic congestion and improving safety. Alternative 6 Orange Alignment, a new route with a US 68/KY 80 interchange (3.8 miles), is the Preferred Alternative. The DEIS states that this alternative would serve traffic needs better than the other alternatives, and would have the least environmental impacts. However, the document also states that a final decision has not been made regarding the selection of either a build alternative or no-build alternative. The FEIS should clarify the alternative selected.

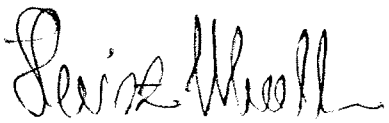
Based on EPA's review of the DEIS, Alternatives 6 Orange received an "EC-1" rating, meaning that environmental concerns exist regarding impacts to groundwater and karst features, noise and secondary and cumulative impacts. Specifically, groundwater in karst areas is susceptible to contamination from surface activities. Ground water quality impacts to the karst hydrology could potentially result from the construction and operation of I-65. Impact avoidance and mitigation are particular areas of concern. Direct and indirect impacts to sinkholes are anticipated, and measures to prevent and mitigate for impacts should be fully described in the FEIS.

In addition, there are four sites along Alternative 6 Orange Alignment that would approach, meet or exceed the Noise Abatement Criterion (NAC). However, the DEIS states that noise barriers would not be reasonable for those receivers experiencing noise levels exceeding the NAC. We recommend that further consideration be given to mitigating these noise impacts.

The Preferred Alternative would also result in indirect and cumulative impacts in the project area. In addition, the DEIS discusses potential indirect adverse effects on two historic sites from land use changes partly induced by the proposed project. We note your coordination with the SHPO. Please see our enclosed detailed comments.

Thank you for the opportunity to comment on this project, and your continuing coordination with EPA. We look forward to reviewing the FEIS. If we may be of further assistance, please contact Ramona McConney of my staff at (404) 562-9615.

Sincerely,



Heinz J. Mueller, Chief
NEPA Program Office

Attachments: EPA review comments
Summary of Rating Definitions and Follow Up Action

cc: Mr. David Waldner, P.E., Kentucky Transportation Cabinet

EPA Review Comments on
Draft Environmental Impact Statement (DEIS)
I-65 to US 31W Access Improvement Project
CEQ No. 20070261

General Comments

Overall, the DEIS is clearly written with helpful maps and illustrations. We appreciate the indexing and the reader-friendly style of the document, which facilitated review of the document. We appreciate the consideration of a diverse array of alternatives.

The DEIS outlines the regional setting of the study area, including the partly constructed Kentucky Transpark (industrial and high-tech business park) and existing regional roadways.

Alternatives

The DEIS identifies Alternative 6 Orange as the Preferred Alternative. However, the document also states that a final decision has not been made regarding the selection of either a build alternative or no-build alternative in this DEIS (page 6-1). The FEIS should clarify the selection of the alternative to be implemented.

Air Quality

The DEIS states that Warren county is designated as being in attainment for all transportation-related pollutants. The project area is currently in attainment of the NAAQS standards. The results of the CO analysis for the Preferred Alternative showed one-hour concentrations ranging from 2.2 ppm to 7.4 ppm, while eight-hour concentrations ranged from 1.3 to 4.9 ppm. Monitoring data for both the ozone and PM2.5 standards should be included in the FEIS.

Cultural Resources/Historic Preservation

The Preferred Alternative would result in indirect adverse effects on two historic sites from land use changes partly induced by the proposed project. Because there are no direct adverse effects with this alternative, no MOA is planned. We note the early coordination of FHWA and KTC with the SHPO.

Environmental Justice

EJ census block data showed that impacts to low-income and/or minority communities from Alternative 6 would not be disproportionate compared to the demographic composition of the project study area as a whole. However, continued coordination with affected populations in the study area should continue as the project progresses.

Noise

Noise Measurements: The truck portion of anticipated traffic may significantly contribute to noise impacts. Trucks are considerably noisier than cars (noise from one truck equals that of many cars). If I-65 will have heavy truck traffic, this would contribute to higher dBA levels.

Overall, traffic noise is an environmental concern in terms of the project incremental increases over existing levels, and the resultant projected noise levels. A 10 dBA increase, at any existing noise level, is perceived as a doubling of sound by the human ear. The DEIS discusses the potential for local officials and developers to minimize noise impacts from the roadway in the future via land use planning.

Noise Mitigation: There are four sites along Alternative 6, Orange Alignment that would approach, meet or exceed the NAC. Impact avoidance and minimization is particularly important for noise impacts, due to the difficulty in effectively mitigating for noise. The DEIS states that noise barriers would not be reasonable for those receivers experiencing noise levels exceeding the NAC, and refers to local officials and developers as potential sources to minimize impacts via land use planning.

Unavoidable noise impacts should be reasonably mitigated. Other forms of noise mitigation (or their combination) should therefore be considered in addition to barriers where they are shown to be infeasible or unacceptable, particularly in residential areas. These forms may include sound proofing significantly affected public facilities, shifting of the right-of-way (ROW) to include residential or commercial receptors that otherwise would be adjacent but outside the ROW and be heavily impacted, and/or development of vegetative screens as part of the landscaping in order to provide a visual separation from the project ROW.

It is also our understanding that the type of roadway surfacing material used may substantially influence the amount of noise impacts generated. As long as feasibility and safety requirements are met, surfacing materials which minimize noise through source reduction are preferred. Finally, noise levels should be monitored after construction, to determine the effectiveness of the mitigation and to determine whether further measures or mitigation are needed.

Karst Topography

The only permit necessary from the KDOW would be a NPDES General Stormwater Permit, since the construction site would be greater than one acre with the selection of any of the build alternatives.

As discussed in the DEIS, ground water in karst areas is very susceptible to contamination from surface activities. Ground water quality impacts to the karst hydrology could potentially result from the construction and operation of I-65. Potential ground water contamination during either construction or operation can occur via spills or runoff. Direct and indirect impacts to sinkholes are anticipated.

Impacts to the subsurface can generally be minimized by routing storm water away from subsurface injection points (injection wells, sinkholes, etc.), and by keeping the storm water drainage on the surface where possible. The FEIS should describe the planned measures to avoid impacts. KYTC has a basic and practical karst Best Management Practices (BMP) policy that focuses on grass swales and detention basins with a minimum volume of 10,000 gallons. This BMP policy should be referenced in the document and included in the appendices.

Where subsurface injection cannot be avoided, authorization from the EPA must be obtained before injection takes place. Emplacement of fluids to the subsurface through wells, modified sinkholes, etc. is regulated by the EPA Underground Injection Control Program. Kentucky does not have primacy for the UIC program. Therefore, the EPA directly implements the UIC program in Kentucky.

Karst features in the area also support natural habitats for wildlife and fauna. The project team should carefully evaluate impacts from the project to the karst features and associated rare and sensitive species, and provide information in the FEIS regarding efforts to avoid and minimize impacts to these features and species. Mitigation measures should also be discussed.

EPA encourages the continued collaborative efforts to protect ground water among the KYTC, the Kentucky Geological Survey, the Kentucky Department for Environmental Protection, and the city of Bowling Green.

Wetlands

The DEIS states that there are no jurisdictional wetlands within the impact area due to karst terrain. Water rapidly drains underground through numerous sinkholes, and consequently either does not remain on the surface long enough to become a wetland, or is not connected with a surface stream.

Secondary and Cumulative Impacts

It is unclear from the DEIS the amount of secondary and cumulative impacts that would result from this project. A goal of the project is economic development, in accordance with the community's existing, planned and approved economic development initiatives in the study area. A second goal is to avoid and minimize impacts to the natural, cultural and human environment. The preferred alternative will have an indirect adverse effect on two historic sites according to the DEIS.

Potential indirect impacts to wildlife habitat acreage is also a concern. In particular, some species rely on karst features for their habitat. The DEIS states that Alternative 6, Orange Alignment is not likely to impact Indiana bats, grey bats nor Kentucky cave shrimp.

Agricultural Impacts

We appreciate the discussion of direct, indirect, and cumulative impacts to agricultural land. The Preferred Alternative would result in conversion of some acreage of farmland, with 410 acres of prime and unique farmland being converted. Ten farms would experience loss.

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment